

# NATIONAL COASTAL ASSESSMENT: A successful State-Federal collaboration in New Hampshire



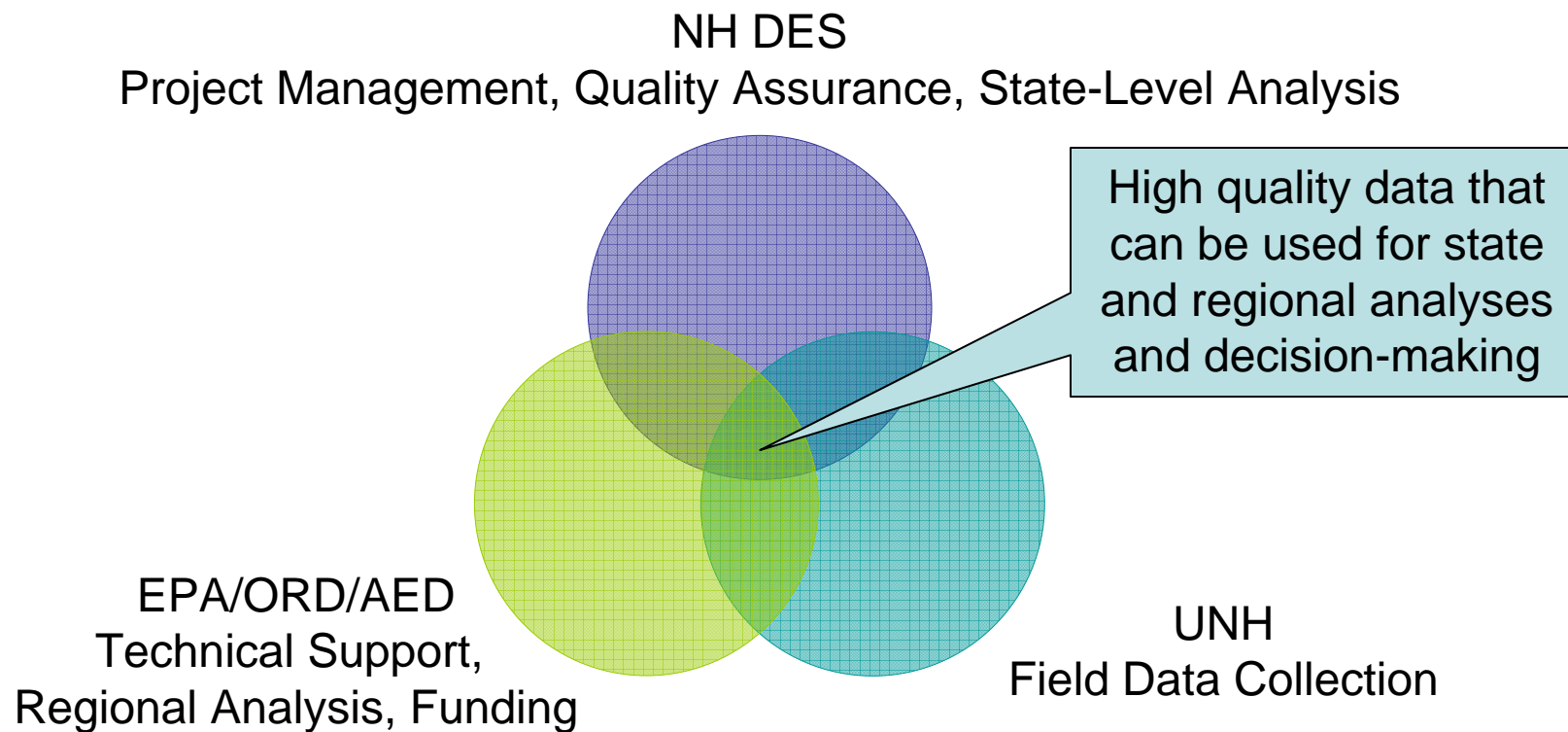
Phil Trowbridge



EPA Science Forum, Washington DC  
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# NCA State-Federal Partnership





# Key Elements of NCA

- A national perspective with flexibility to address state needs
  - Standardized indicators and methods
  - Probabilistic sampling design
  - National coverage
  - Flexibility to add other indicators or designs as needed at the State level

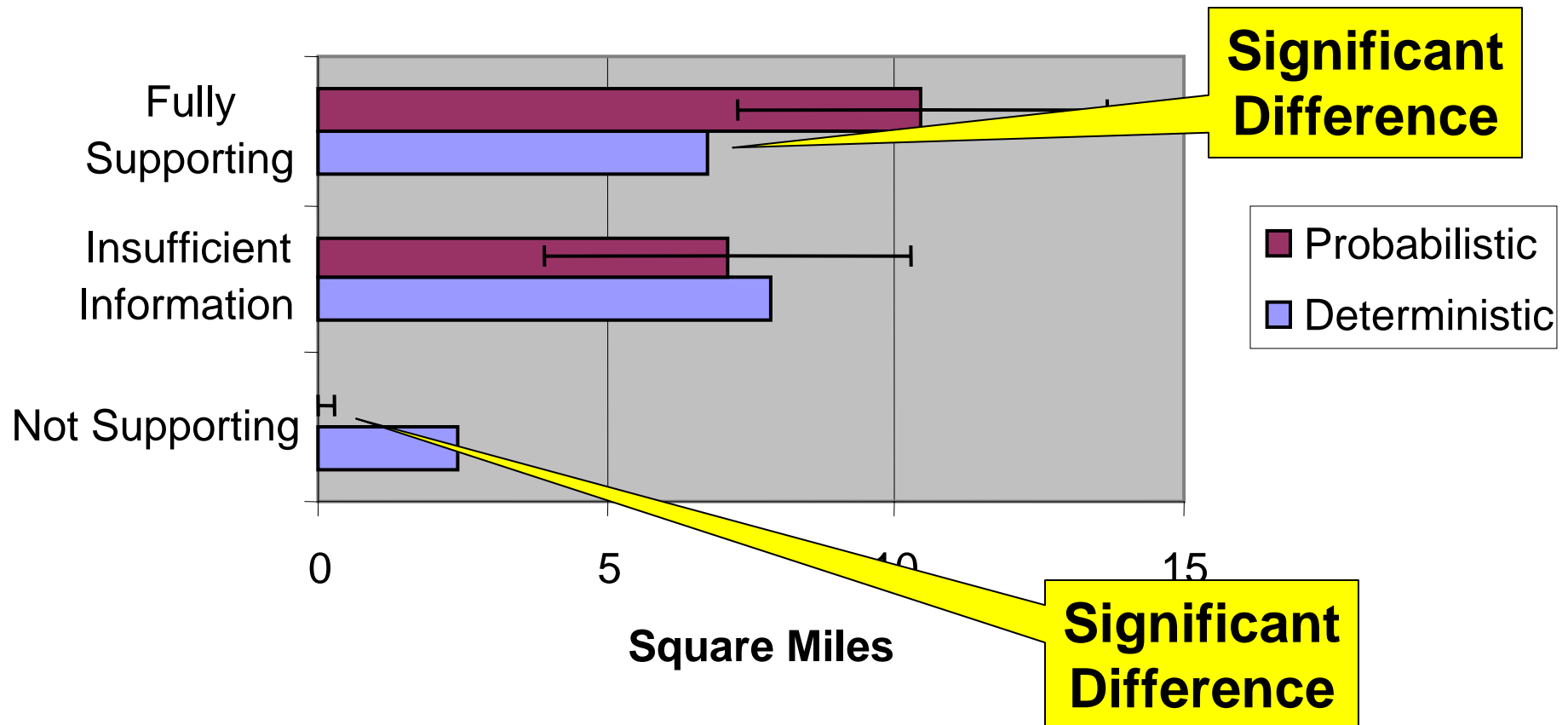


# Examples of State Decision-making with NCA Data



# Improving 305(b) Assessments

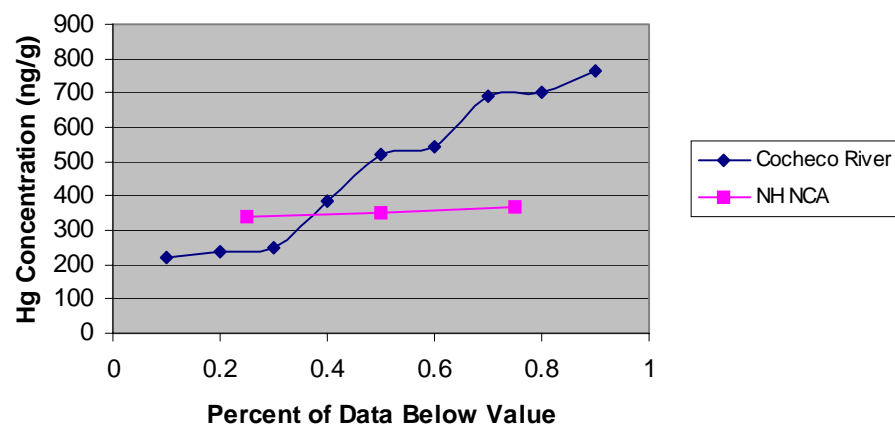
## Aquatic Life Use Support



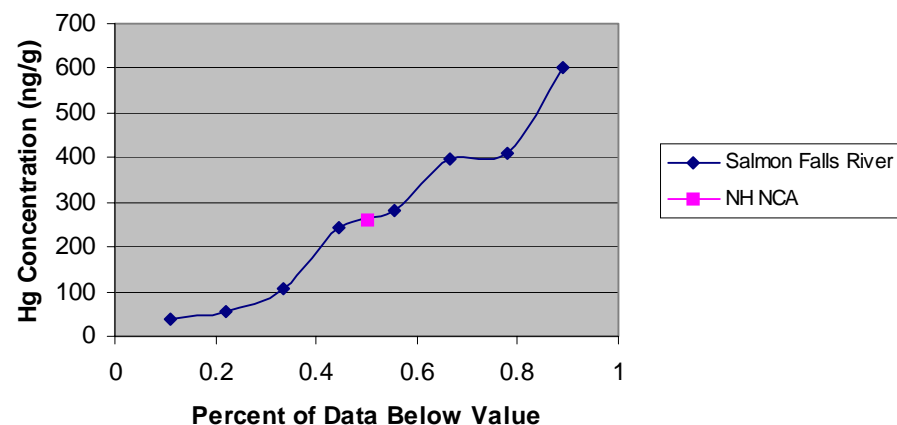
# Optimizing Study Design

## Representativeness of Random Samples

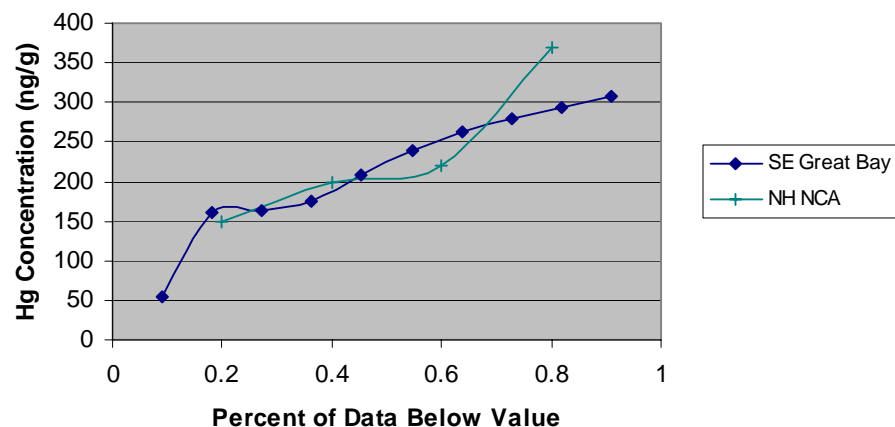
Hg Concentrations in the Cocheco River



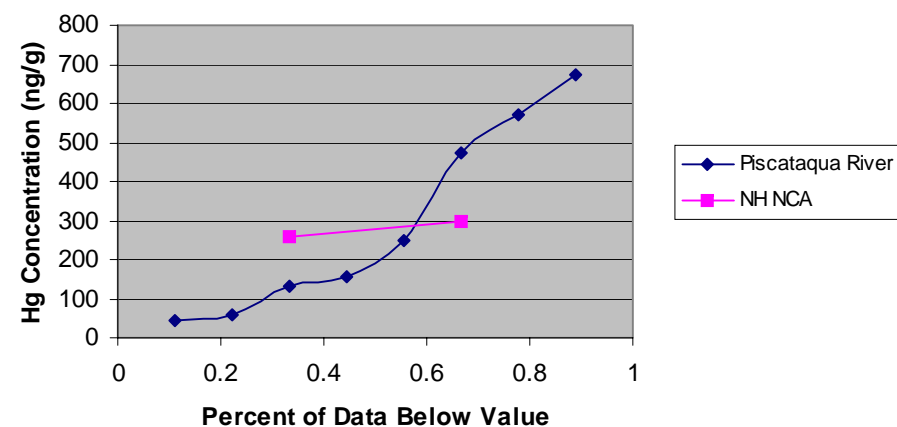
Hg Concentrations in the Salmon Falls River



Hg Concentrations in SE Great Bay

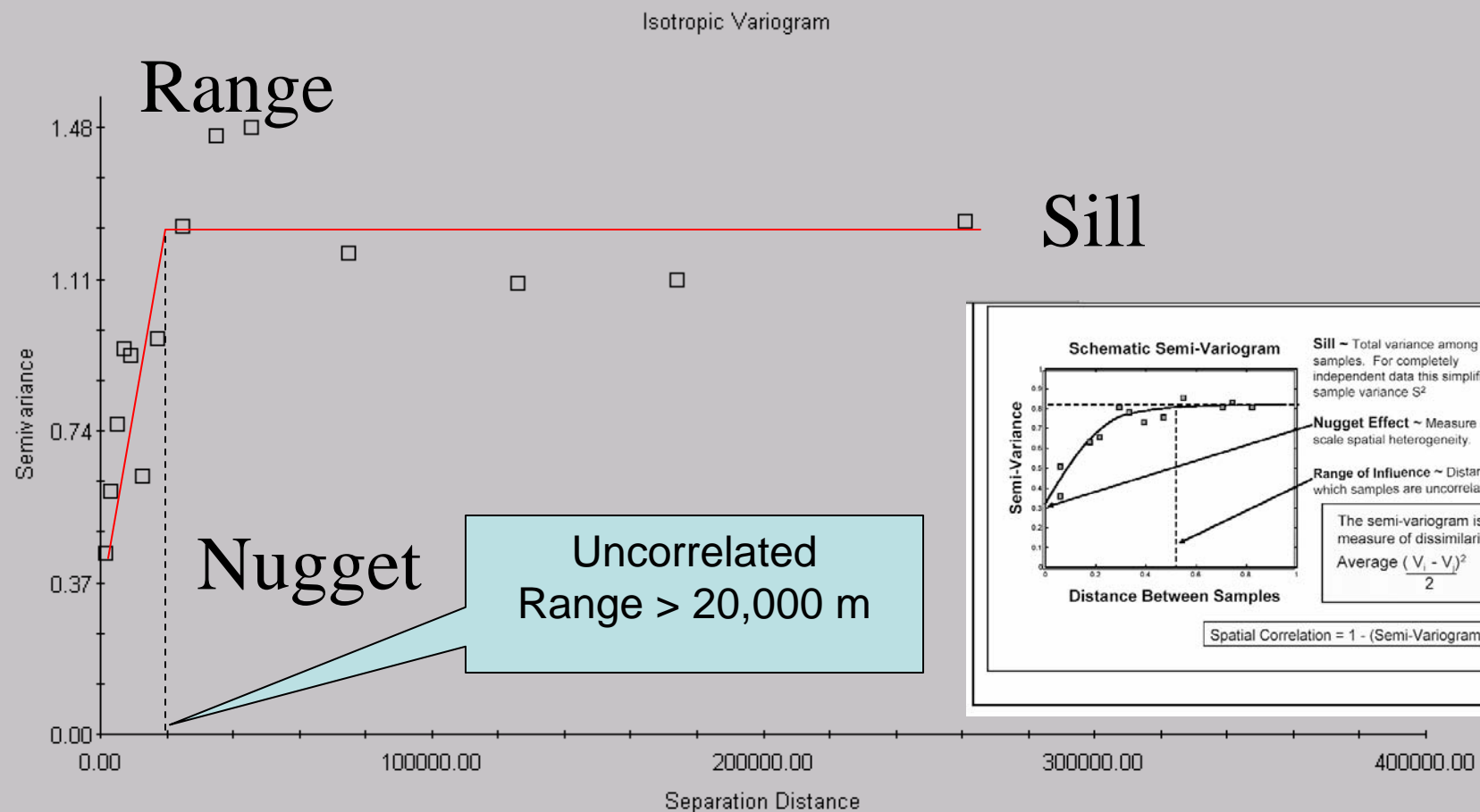


Hg Concentrations in the Piscataqua River



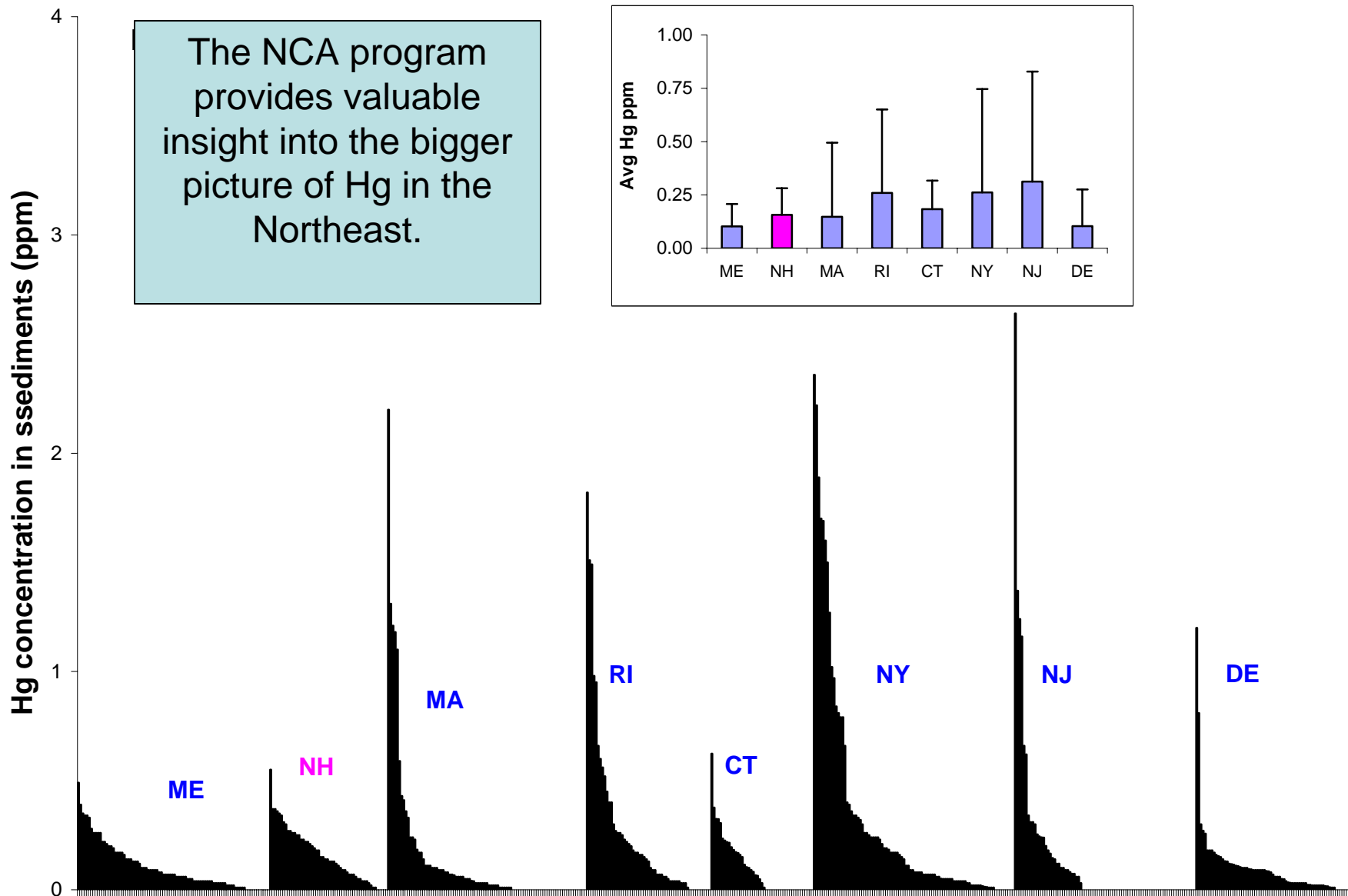
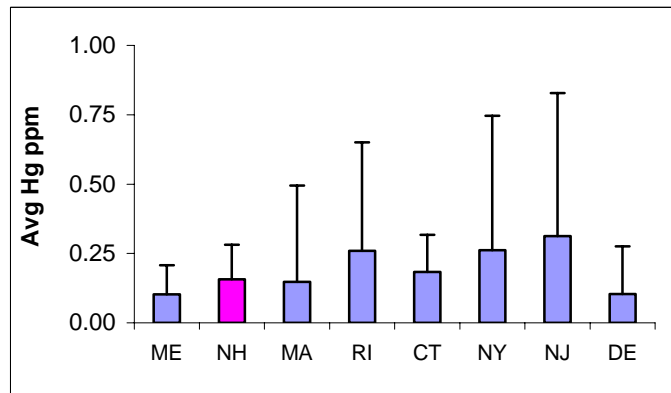
# Optimizing Study Design

## Spatial Correlation: Semivariogram for Ln [Hg] in the Gulf of Maine



# Regional Comparisons

The NCA program provides valuable insight into the bigger picture of Hg in the Northeast.





# Tech Transfer – NH's role has expanded over 5 years

|       | Field | Water | Fish | Sediment | Tissue | Add ons | Design | Analysis |
|-------|-------|-------|------|----------|--------|---------|--------|----------|
| 00-01 | X     |       | X    |          |        |         |        |          |
| 2002  | X     |       | X    |          |        | X       |        |          |
| 2003  | X     |       | X    |          |        | X       | X      | X        |
| 2004  | X     | X     | X    |          |        | X       | X      | X        |

X = New Hampshire Lead

# Summary

- NCA has been a successful partnership between EPA and NH DES.
- NCA data have been used to cost-effectively meet state needs (e.g. 305(b)).
- NCA technology transfer has built capacity in NH for coastal monitoring.



# Acknowledgments

- EPA Office of Research and Development, Atlantic Ecology Division
- University of New Hampshire





# Questions/Comments

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